

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>0887-4133PC</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/US 99/ 08294</b>	International filing date (day/month/year) <b>15/04/1999</b>	(Earliest) Priority Date (day/month/year) <b>15/04/1998</b>
Applicant  <b>THE RESEARCH FOUNDATION OF STATE UNIVERSITY OF NEW</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☒ furnished subsequently to this Authority in written form.

☒ furnished subsequently to this Authority in computer readable form.

☒ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☒ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☒ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 99/08294

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 19  
because they relate to subject matter not required to be searched by this Authority, namely:  
Remark: Although claim 19  
is directed to a method of treatment of the human/animal  
body, the search has been carried out and based on the alleged  
effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such  
an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all  
searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment  
of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report  
covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is  
restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

National Application No

PCT/US 99/08294

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 C12N15/86

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SCHMID S.I., HEARING P.: "Selective encapsidation of adenovirus DNA" CURRENT TOPICS IN MICROBIOLOGY AND IMMUNOLOGY, vol. 199, no. 1, 1995, pages 67-80, XP002117827 the whole document ---	1
X	SCHMID S I AND HEARING P: "Bipartite structure and functional independence of adenovirus 5 packaging elements" JOURNAL OF VIROLOGY, vol. 71, no. 5, May 1997 (1997-05), pages 3375-3384 3384, XP002108134 ISSN: 0022-538X cited in the application the whole document especially figures 1-8 and discussion --- -/--	10,14, 18,19



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

### \* Special categories of cited documents

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

2 November 1999

Date of mailing of the international search report

10/12/1999

Name and mailing address of the ISA

European Patent Office, P B 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040. Tx. 31 651 epo nl.  
Fax: (+31-70) 340-3016

Authorized officer

Panzica, G

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/08294

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	O'CONNOR R J ET AL: "THE C-TERMINAL 70 AMINO ACIDS OF THE ADENOVIRUS E4-ORF6/7 PROTEIN ARE ESSENTIAL AND SUFFICIENT FOR E2F COMPLEX FORMATION" NUCLEIC ACIDS RESEARCH, vol. 19, no. 23, 11 December 1991 (1991-12-11), pages 6579-6586, XP000604601 ISSN: 0305-1048 ----	15
X,P	SCHMID S.I., HEARING P.: "Cellular components interact with adenovirus type 5 minimal DNA packaging domains" JOURNAL OF VIROLOGY, vol. 72, no. 8, August 1998 (1998-08), pages 6339-6347, XP002117828 cited in the application the whole document ----	1,5, 7-15, 18-20
A,P	DULL T. ET AL.: "A third-generation lentivirus vector with a conditional packaging system" JOURNAL OF VIROLOGY, vol. 72, no. 11, October 1998 (1998-10), pages 8463-8471, XP002117829 BALTIMORE, US abstract ----	1
X	TAGGART A. ET AL.: "The TATA-binding protein and associated factors are components of Pol III transcription factor TFIIB" CELL, vol. 71, no. 6, 1992, pages 1015-1028, XP002117830 abstract ----	20
X	D'HALLUIN J.C. ET AL.: "Effects of novobiocin on adenovirus DNA synthesis and encapsidation" NUCLEIC ACID RESEARCH, vol. 8, no. 7, 1980, pages 1625-1641, XP002117831 OXFORD, GB the whole document ----	1
A	HUANG M.M., HEARING P.: "The adenovirus early region 4 open reading frame 6/7 protein regulates the DNA binding activity of the cellular transcription factor, E2F, through a direct complex" GENES AND DEVELOPMENT, vol. 3, 1989, pages 1699-1710, XP002119862 cited in the application -----	